

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adopted 9-1-65

COMPANY PEC LEASE AKCO Fed #1 WELL NO. 1 DATE 12-27-76

LOCATION: Unit I Section 13 Township 21S Range 26E

L 11126 H 11126 L/H 1.000 G 0.595 % CO₂ 0.68 % N₂ 0.21 % H₂S 11.1

11088' 2 1/4" 1018231 207-14532 8682
38' 2 1/4" 10017585 207-21716
F_i 0.018175 GH 6620 P_{cr} 675 T_{cr} 355
TABLE IN B X TABLE IN B X

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Q _m	0	1085	1504	1895	2184																		
2 T _w (W.H. °R)	509	508	506	504	502																		
3 T _s (B.H. °R)	635	634	632	630	625																		
4 T = (T _w + T _s)	592	591	569	567	565																		
5 Z (Est.)	.90	.86	.82	.85	.88																		
6 T _Z	514.80	479.64	466.58	481.75	497.2																		
7 GH/T _Z	12.859	13.802	14.188	13.736	13.315																		
8 e ^s (Table XIV)	1.620	1.6780	1.7024	1.675	1.6510																		
9 1 - e ^s (Table XIV)		0.4100	0.4130	0.4025	0.3950																		
10 P _t	3564.2	2743.2	2261.2	1631.2	119.2																		
11 P _t 2/1000	12703.5	7525.15	5113.0	2697.7	844.9																		
12 F _t (Table XV)																							
1 F _c = F _t T _Z		8.7175	7.0881	8.7194	9.0266																		
14 F _c Q _m		7.1458	19.0504	16.193	19.776																		
15 L/H (F _c Q _m) ²		89.462	162.67	275.5	384.5																		
16 F _w = L/H (F _c Q _m) ² (1 - e ^{-s})		36.68	69.15	110.9	153.1																		
17 F _w ² = P _t ² + F _w		7561.32	5180.12	2134.6	998.0																		
18 P _s ² = e ^s P _w ²	20579.7	12688.7	8818.4	4670.6	1644.3																		
19 P _s	4536.5	3568.1	2969.6	2163.6	1288.3																		
20 P = (P _t + P _s)	4050.3	3152.7	2615.4	1902.4	1100.7																		
21 P _t = (P/P _{cr})	6.000	4.071	3.875	2.816	1.631																		
22 T _t = (T/T _{cr})	1.611	1.608	1.605	1.597	1.592																		
23 Z (Table XI)	895	.837	.818	.821	.878																		